

Automate from dashboard to website with MongoDB Atlas

Step 1: Prepare a MongoDB Atlas database

1. **Create a MongoDB Atlas cluster:** for storing and managing data exported from the dashboard.
2. **Data synchronization:**
 - Using Power BI data sources, export data to MongoDB.
 - Data can be automatically updated and synchronized to MongoDB via Power BI scripts such as Power Query.
3. **Enable the MongoDB Data API:** Provides API access for websites.

Step 2: Publish a Power BI dashboard

1. **Publish to Power BI Services:**
 - Publish a Power BI report or dashboard to the Power BI service.
 - Set the data refresh frequency (such as hourly or daily) to keep the data up to date.
2. **Enable dashboard embedding:**
 - Get the embed code in the Power BI service (by embedding it into a web page or portal function).
 - Select the appropriate sharing permissions (public access or restricted access).

Step 3: Automate data flow

1. **Integrate MongoDB with Power BI:**
 - Use Power BI's connectors to get data from MongoDB Atlas.
 - Configure Power BI data set to automatically refresh to ensure that the dashboard reflects MongoDB data changes in real time.
2. **Real-time or batch updates:**
 - Use MongoDB Change Streams to realize real-time data flow.
 - Or periodically push dashboard data to MongoDB through scheduled tasks.

Step 4: Website integration

1. **Front-end embedded Power BI dashboard:**
 - Embed the dashboard into your website using the iframe embed code provided by Power BI.
 - Make sure to follow Power BI's authentication and rights management when embedding.
2. **Back-end interaction with MongoDB:**
 - If the site needs to present additional data (such as data from MongoDB), develop an API interface for the front end to call.

Step 5: Security and rights management

1. Power BI Authority:

- Configure access to the dashboard to ensure that only certain users or groups have access.
- Use Power BI's Row-Level Security (RLS) to control the range of data that users can see.

2. MongoDB Atlas permissions:

- Set refined user rights to ensure database security.
- If the front end of the site accesses the database directly, it is recommended to use read-only credentials.

Tools needed

- Power BI Desktop and Power BI services
- MongoDB Atlas and Data API
- Data connectors (such as MongoDB's ODBC connector or Power Query)